NAUTICUS HULL
RELEASE DOCUMENT

JANUARY 2011 RELEASE

DET NORSKE VERITAS

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1 Introduction

1.1 Purpose

The purpose of this document is to inform the users about system requirements, new programs and functionalities, enhancements and bug fixes that are implemented in Nauticus Hull since previous release.

Details about the implementations in all programs are not fully covered in this document, and for more information the user should consult the program documentations being a part of the local installations.

For details about rule implementations in the programs, the user should consult the approval engineers for information about how to use the program for specific ship structures.

For information on how to install the program, please consult the Nauticus Hull Installation Guide.pdf, which can be found on the root of the installation CD.

1.2 IMPORTANT INFO ABOUT OLDER JOBS

In the Nauticus Hull January 2011 release access to old hull jobs, created on Nauticus Hull versions older than September 2006, is no longer available. The reason for this is that Nauticus Hull January 2011 is ready for Windows 7, and the technology used in Nauticus Hull versions older than September 2006 is not feasible for porting to Windows 7.

Please read document '*ConvertOldJobs*' found on the installation disc, preferably before installation of this release. See also part 4.1 in this document.

1.3 CSR-Tank and CSR-Bulk

CSR-Tank is in this document used as an abbreviation for "IACS Common Structural Rules for Double Hull Oil Tankers". CSR-Tank is applicable for double hull oil tankers with length $L \geq 150$ m.

CSR-Bulk is in this document used as an abbreviation for "IACS Common Structural Rules for Bulk Carriers". CSR-Bulk is applicable for bulk carriers with length $L \geq 90$ m.

1.4 Longitudinal positions in Nauticus Hull and the Rules

1.4.1 Length between perpendiculars in Nauticus Hull

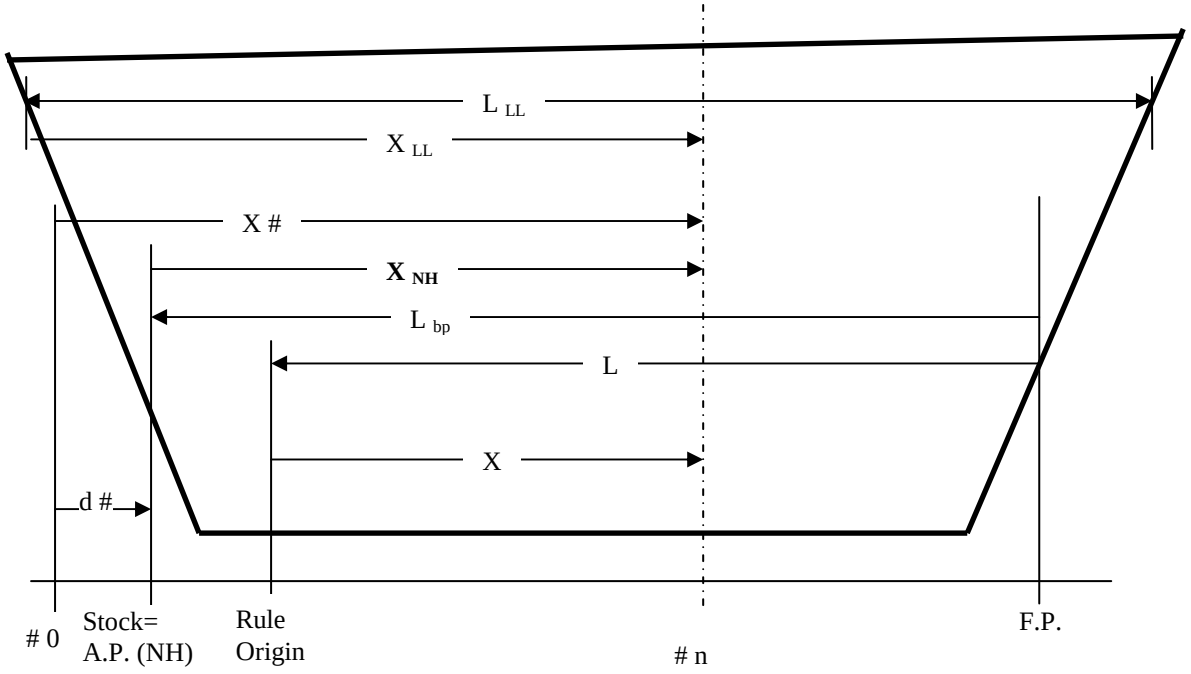
Please, note the following definition of "Length btw. Perpendiculars, Lbp" used in Nauticus Hull:

The length between perpendiculars is the distance on the scantling draught waterline from the fore side of the stem to the after side of the rudder post, or to the centre of the rudder stock if there is no rudder post.

This definition is strictly correct only for CSR-Tank but is assumed valid also for DNV 1A1 and CSR-Bulk in Nauticus Hull.

Hence, this distance should be entered for Lbp for all class notations in Nauticus Hull!

1.4.2 Longitudinal positions and lengths



L_{LL} = Freeboard length. Ref. ILLC, as amended (Resolution MSC.143(77) Reg. 3(1,a & c))

X_{LL} = X coordinate measured from the aft end of the freeboard length L_{LL} This is a new parameter introduced in the July 2010 edition of the Rules for CSR Bulk.

X# = X coordinate measured from frame #0.

X_{NH} = X coordinate used in Nauticus Hull user interface and reports, is the distance from the rudder stock.

L_{bp} = the length between perpendiculars according to the definition in Nauticus Hull.

L = Rule length.

X = X coordinate used in the Rules and is measured from the aft end of L.

d# = distance from frame #0 to the rudder stock.

A.P. (NH) = origin of coordinate system used in Nauticus Hull user interface and reports
= position of the rudder stock.

Rule Origin = origin of coordinate system used in the Rules, denoted;
- A.P. in DNV 1A1 and CSR-Tank
- A.E. in CSR-Bulk

#n = frame number for the considered position.

F.P. = the intersection with the fore side of the stem with;
- the summer load waterline for DNV 1A1 and CSR-Bulk
- the scantling draught waterline for CSR-Tank.

1.4.3 Conversion between position X_{NH} in Nauticus Hull and X in the Rules

To convert between the longitudinal position used in Nauticus Hull user interface and reports, X_{NH}, and the longitudinal position X used in the Rules, the following is applied:

$X = X_{NH} – (L_{bp} - L)$

$X_{NH} = X + (L_{bp} - L)$

2 Programs and versions

The following Nauticus Hull and Sesam programs are available in the January 2011 release:

Program	Version
Rule Check	14.0
3D Beam	14.0
PULS	2.0.11
GeniE	5.2-04
Sesam Manager	5.3-05
Presel	7.4-02
Sestra	8.4-01
Cutres	1.5-01
Submod	3.2-01
Xtract	2.1-00
Postresp	6.2-04

New and old releases of the different programs are available for download on our web site
http://www.dnv.com/software/support/index.asp

3 System Information

3.1 Software requirements

- Excel and Word from Microsoft Office 2003, 2007 or 32 bits version of 2010.
- Internet Explorer 5.01 or later versions.
- Microsoft .NET Framework 3.5.

3.2 Hardware requirements

Processor CPU	Memory Minimum	Memory Recommended	Storage	Also recommended
1.5 GHz	2 GB	4 GB	10 GB	- 1280 x 800 or larger screen resolution - OpenGL hardware accelerator - Dual core processor

3.3 Operating system requirement

Windows XP, Windows Vista or Windows 7. File system should be NTFS.

3.4 Decimal Separator

3.4.1 Decimal separator (symbol)

It is required to use **.** (dot) as decimal separator for some of the Nauticus Hull programs (e.g. Word and Excel report from Section Scantlings).

Open Control Panel → *Regional Settings* to inspect and modify the separator symbols.

If changing Decimals Symbol sign given in regional setting from what is default for selected country, change Decimal Symbol both for numeric and *currency* values. Otherwise, the RCXL spreadsheets may produce wrong result.

3.4.2 List separator

List separator sign must be different from the decimal separator used. Use comma , or semicolon ;

4 New Functionality

4.1 Support for Windows 7

Windows Vista and Windows 7 are now fully supported as well as Microsoft Office 2007 and 2010 (32 bits version). Some program modules are removed from Nauticus Hull in order to achieve this:

- Old program packages (*.BxPkg* jobs) can no longer be opened.
- *FPSO Initial design* is removed
- 3D-Modeller is replaced by *GeniE*.
- 2D-Modeller is removed.

4.2 Spreadsheets

The following Spreadsheets have been added or modified in accordance with Rule amendments:

- Accelerations.xls.
  Accelerations according to Pt.3 Ch.1 Sec.4B. This is a successor to MotionJan99, valid from January 2009 for 1A1. It includes the updated GM values for Container Vessels, but the actual accelerations do not consider the minimum values specified for Container Vessels in Pt.5.
- BowImpact2008Jan.xls.
  Now applies the January 2010 Rules when applicable.
- ContainerSecuringJan10.xls.
  New version according to CN 32.2 October 2009 and DNV Rules Jan 2010.
- Deckhouse2010.xls.
  Including new class notations for Offshore support vessels introduced July 2010.
- MinThick0901.xls.
  New version of MINTHIC with amendments for Pt. 3 Ch. 1 and Pt. 3 Ch. 2 valid from January 2009.
- MixedContainerStowageJan10.xls.
  New version according to CN 32.2 October 2009 and DNV Rules Jan 2010.
- MixedContainerStowageJan10.xls.
  New version according to CN 32.2 October 2009 and DNV Rules Jan 2010.
- Slamm.xls
  Rule change July 2009: Effective load length for bottom slamming loads has been changed from (l - s) to (l - 0.5s). New formulation of requirement to shear area.

4.3 User Manuals

The following User Manuals have been added or modified in accordance with new functionality:

- Container Securing

- Simplified Fatigue
- Simplified Torsion
- Global ULS for 1A1 Container Ships
- Cargo Hold Analysis

4.4 Global ULS Analysis for 1A1 Container Ships

Global ULS analysis according to the DNV Rules for Classification of Ships, July 2010, Pt.5 Ch.2 Sec.6 is included in the Cross Section Analyses tool. A separate user's manual for the Global ULS analysis has been included in Documentation.

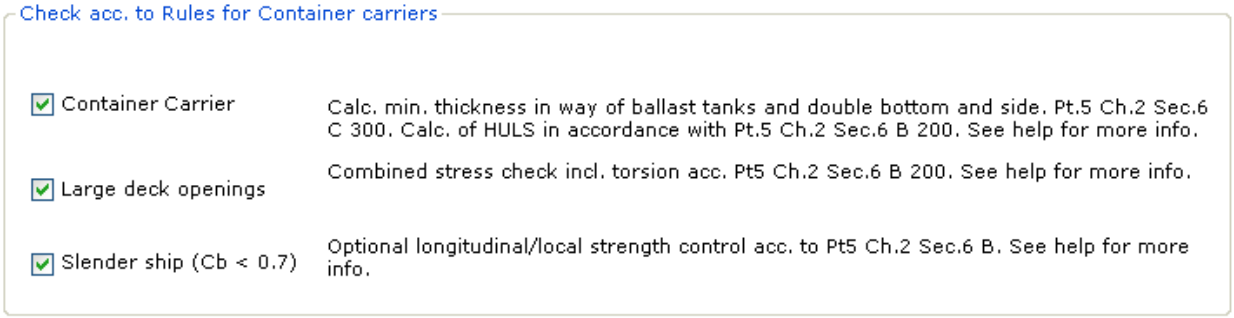
5 Error Corrections and Limitations

5.1 Ship data

Options for container carriers
(IM 1755)

In previous versions of Nauticus Hull, the three options below were treated as independent options.
In Section Scantlings, the “Simplified torsion” results were included only in case the option “Large deck openings” was checked.
If only the option “Container carrier” was checked, these calculations were bypassed.
This has lead to confusion.

For container carriers, “Large deck openings” and “Slender ship” will now be assumed by default.
That is, if you check the “Container Carrier” option, the two others will be checked automatically.


Check acc. to Rules for Container carriers
Container Carrier
Calc. min. thickness in way of ballast tanks and double bottom and side. Pt.5 Ch.2 Sec.6 C 300. Calc. of HULS in accordance with Pt.5 Ch.2 Sec.6 B 200. See help for more info.
Large deck openings
Combined stress check incl. torsion acc. Pt5 Ch.2 Sec.6 B 200. See help for more info.
Slender ship (Cb < 0.7)
Optional longitudinal/local strength control acc. to Pt5 Ch.2 Sec.6 B. See help for more info.

This will ensure that the “Simplified torsion” calculations will always be included for container carriers.

5.2 Compartments and Loads

5.2.1 Improvements for symmetric ships

The tank plan view and the compartment editing grids have been improved for symmetric models. For symmetric Cross Sections represented by a half model, the waterline view of the tank plan now shows only the port side of the ship, the starboard side is not visible. In the compartment grids only compartments on the port side are listed. All updates in compartments, as joining or changing attribute values, are also mirrored to the starboard side compartments. For models with a combination of symmetric half model Cross Sections and un-symmetric two-side Cross Sections, this mechanism only affects the symmetric parts of the ship.

5.2.2 Bug when opening jobs from July 2009 version

When opening old jobs from version “July 2009” or older, some compartments were not found and so the “Compartment and Loads” tool generated new compartments replacing the compartments not found. Therefore some compartment data were lost. This occurred in models where the cross section contained decks of type ‘tween deck. This is now fixed.

5.3 Section Scantlings

5.3.1 Updated Rule requirements

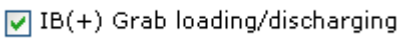
Class notations IB-1, IB-2 and IB-3 (Relevant for DNV Rules 1A1)
(IM 1450)

In the July 2007 version of DNV Rules, the notation **IB(+)** was removed and replaced by the three notations **IB-1**, **IB-2** and **IB-3**.
These notations cover the areas that are especially strengthened for grab loading/discharging, as specified below:

IB-1 Strengthening of inner bottom.
IB-2 Strengthening of inner bottom, and lower part of transverse bulkhead.
IB-3 Strengthening of inner bottom, and lower part of transverse and longitudinal bulkhead.

The notation **IB-3** is equivalent to the old notation **IB(+)**.

In the “Edit Ship data” dialog (Brix Explorer), the “Grab loading/discharging” option will depend on the Rule version, as follows:
Jan 2007 and earlier:



July 2007 and later:

5.3.2 Error Corrections

Offshore ships, benign waters (DNV Rules)
(IM 1749)

In the ULS moment dialog and also in the results Report, the operation environment is displayed for verification ("World Wide operation" or “Benign waters”). In some cases the text “World wide operation” was displayed when correct text would be “Benign waters”.

The error has been corrected.

Incorrect shear flow results
(IM 1721)

a) Incorrect shear flow calculations have been reported for some cross sections, and some of the accumulated values Fy, Fz, or Mx in the table “Torsional Section Characteristics” deviated significantly from 1.0. Errors in the shear flow results have also been reported for cross sections with complex geometry.

b) In some cases, the shear flow direction arrows in some parts of the structure were pointing in the wrong direction, although the shear flow results were correct. This was just an error in the plot, but lead to confusion.

The errors a) and b) have been corrected.

Transverse bulkhead Wizard - Strange results after changing the bulkhead data (DNV Rules 1A1)
(IM 1730)

After changing the hopper tank data (height or width), the bulkhead contour was not updated accordingly. As a result, the calculated filling height for bulk cargo (based on mass/hold volume) was based on the old contour points.

The error has been corrected.

Incorrect allowable stress for stiffeners on watertight transverse bulkhead
(DNV Rules 1A1 Pt.3 Ch.1 Sec.9 C 101)
(IM 1578)

For watertight bulkheads, the allowable stress value in the flooded condition was 280f1, but should have been 220f1.
As a result, the section modulus requirement for the stiffeners became too small.

The moment factor m was displayed as 0.0 in the Local Rule requirements table, but the correct value m=10 was applied in the calculations.

The errors have been corrected.

Shear buckling strength of plates
(Relevant for DNV Rules 1A1)

For some of the plates where the shear buckling strength is the decisive requirement, wrong reference points (y_b, z_b) were reported, see below table.

14 Local Rule Requirements - Plates

Plate No	ACT	t_{act} mm	Steel	t_k mm	t_{kb} mm		Ω m^2	Eff (%)	Span mm	Spac mm	τ N/mm^2	σ_F N/mm^2	f_1
LOC			t_{loc} mm	Pos		Load Ref.		Loc. ref.	y_l mm	z_l mm	Comp ref.	σ N/mm^2	p kN/m^2
BUC			t_{buc} mm	η	ψ	k	c	Buc ref.	y_b mm	z_b mm	σ_L N/mm^2	σ_c or τ_c N/mm^2	σ_{cr} or τ_{cr} N/mm^2
3	ACT	9.0	std	0.0	0.0		50.12	100	3150	868	86.2	235.0	1.00
	LOC		8.88	Insid		Liq air 4		Lat	14100	10970	1	152.5	63.9
	BUC		9.50 *	0.90	0.93	5.64	1.00	shear	14100	10970	30.0	94.8	99.0

The error has been corrected.

Allowable shear stresses for plates
(IM 1754)
Relevant for DNV Rules 1A1.

The shear stresses in ship's sides and longitudinal bulkhead shall not exceed 110 f_1.
Refer to DNV Rules Pt.3 Ch.1 Sec.5 D 101.

The limit 110 f_1 is a global shear yielding limit, but was not considered in previous versions of the program.
Now shear stresses beyond 110 f_1 will be printed with a trailing asterisk.

Moments and Shear Forces used in PULS buckling check

- The Section Scantlings dialog “Design bending moments and shear forces (Still water and wave)” sometimes showed zero-values in some of the input-fields for “Standard Rule values” and “Given as Ship data (curve)” where there should have been non-zero values. This is corrected.
- In the Section Scantlings report under the chapter “Moments and Shear Forces used in PULS buckling check” a wrong value was sometimes printed for “Wave bending moment, hogging” It had the same value as the sagging value and was marked as “Input” where it should have been marked as “Rule”. This is now corrected.

5.3.3 Other changes

Transverse bulkhead, flooded condition (UR S18)
(IM 1753)
Relevant for bulk carriers (DNV Rules, CSR-Bulk)

For the floors, there are no special requirements in the flooded condition S18.
In the output results for floors, only the minimum thickness was included. Now the local requirements for floors are included, based on the intact condition.

The complete load reference text and also the comment "(Intact condition)" are included for reference.

Unit warping
Relevant for container ships and also for ships with large deck openings (DNV Rules 1A1)
The unit warping, is now included on the ACT line. For other than container ships, the unit warping is not relevant, and a minus sign is displayed instead.

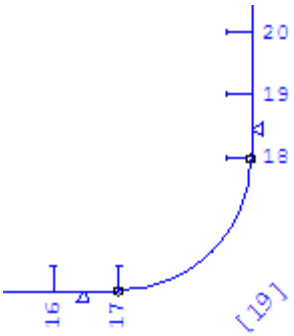
14 Local Rule Requirements - Plates

Plate No	ACT	t_{act} mm	Steel	t_k mm	t_{kb} mm		Ω m^2	Eff (%)	Span mm	Spac mm	τ N/mm^2	σ_F N/mm^2	f_1

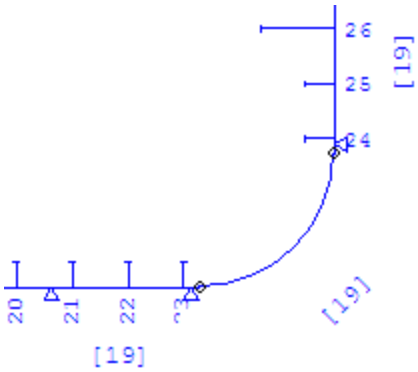
5.3.4 Limitations

CSR-Bulk Rules

- The specific requirements for ships with length less than 150 metres are not included.
- Bilge plate requirements, Ch 6, Sec 1, [2.3]:
  For the transition zone between the flat bottom and the curved bilge, the bilge plate requirements are not specifically considered in the Rules. Thus the calculated requirements are limited to cases where the curved bilge area is modelled with a longitudinal stiffener at the transition point between the flat bottom and the curved bilge.
  The same limitation applies to the transition zone between the curved bilge and the flat ship side.



Supported configuration:
Stiffener at transition point.



Not supported configuration:
Stiffener not at transition point

- Buckling strength of curved plates:
  Plates with a varying curvature (or having both flat and curved parts) are not covered by the Rules and should be specially considered.

DNV Rules 1A1 – fatigue strength requirements for bulk carriers

- Loads from bulk cargoes are not included in the fatigue calculations.

5.4 Rule Check Analyses

5.4.1 Error corrections

1A1-FEABucklingPostProcTemplate.xls

- (IM 1581) The Rule moment curve in the Ship Data sheet has been updated. When adjustments for C_{AV} and C_{AF} overlaps, the same interpretation as in Section Scantling and the Hull Girder Loads Tool, is now applied:

  If CAV < 0.28 AND CAF < 0.4 THEN no correction
  If CAV >= 0.28 AND CAF < 0.4 THEN correction for CAV only
  If CAV < 0.28 AND CAF >= 0.4 THEN correction for CAF only
  If CAV >= 0.28 AND CAF >= 0.4 AND CAF<0.5 THEN correction for CAV AND CAF
  If CAV >= 0.28 AND CAF >= 0.5 THEN CAF only

- (IM 1736) The spreadsheet has been updated to handle mm as unit in the *.sin input files. In previous versions, meter was expected and use of mm caused errors in ship data and load sheets.

SimplHullTorsion.xls.

- Various additions, modifications and corrections, e.g. thickness and radius for hatch corners, correction factors for HFO deep tank structures, possibility to specify if BHD 1 is the E/R BHD, fraction of time at sea, removed Gamma factor, new fatigue formulae.

StiffenedPlateBuckling_RP-201.xls.

- (IM 1502, 1691) All transverse stress is applied to the girder and none applied to plate and stiffeners for Method 2.

CSR-Bulk_AllowableHoldLoading.xls.

- (IM 1707, 1743, 1745) Correction of net thickness requirement, re-design of input with more default values, possibility for different thickness and yield for panels in way of hole, efficient ends also for floors.

CSR-Tank_Ch10.3.2-4_Buckling.xls.

- (IM 1746) Several error corrections.

5.5 FE Analyses – GeniE

5.5.1 Error corrections

DNV Rules, Container carriers

- In the previous version it was assumed that all the corners of a container had a corresponding support point at the transverse bulkhead (i.e. a stringer and/or a girder) where longitudinal and transverse loads from the container could be applied. However, for some newer designs this may not be the case. In such cases the loads in corners that are not supported are now distributed to the other corners of the container that are supported.
- In the previous version the vertical loads from 40’ containers on top of 20’ containers were distributed evenly to all the bottom corners of the 20' containers. This is now changed so that the loads from the 40’ containers are distributed only to the aft and forward bottom corners of the 20’ containers.

DNV Rules, Fatigue loads

- The f_a factor was not included in the calculation of fatigue internal tank pressures. This error is now corrected.

5.5.2 Limitations

DNV Rules

- Internal members and plate boundaries for ballast tanks and cargo oil tanks have to be split manually in GeniE at 1.5 m below weather deck tank top in order to get correct corrosion additions.
- Plates and stiffeners that span over compartments with different corrosion additions have to be split manually in GeniE at the compartment boundaries in order to get correct corrosion additions.
- Boundary conditions at the end planes and the CL symmetry plane of the model are only applied to intersection lines between plates and the planes.
- Loads for bulk carriers and ore carriers are not implemented.

CSR-Tank

- Internal members and transverse plate boundaries for ballast tanks and cargo oil tanks have to be split manually in GeniE at 3 m below top of tank in order to get correct corrosion additions.

- Plates and stiffeners that span over compartments with different corrosion additions have to be split manually in GeniE at the compartment boundaries in order to get correct corrosion additions.

5.6 Puls 2.0.11

An error message appearing in very rare cases is eliminated.

6 Notes about Office 2007 and 2010

6.1 Spreadsheets

The majority of the spreadsheets are modified for this release in order to pass the 'compability checker' within Office 2007 and 2010. Old/existing spreadsheets already included in a Job will naturally not be improved or fixed by this release. They will likely give warnings and/or error messages (dependent on Office version and security settings). These kind of messages are however not likely to affect calculations and results.

All Nauticus Hull spreadsheets are dependent on embedded macros (VBA code). Such macros are by default disabled in Office 2007/2010 to enhance security. There are several ways to enable macros. Here are three alternatives:

a) Add DNV to "*Trusted Publishers*".
b) Add Hull Job Directory to "*Trusted Locations*"
c) Enable content upon opening of each spreadsheet.

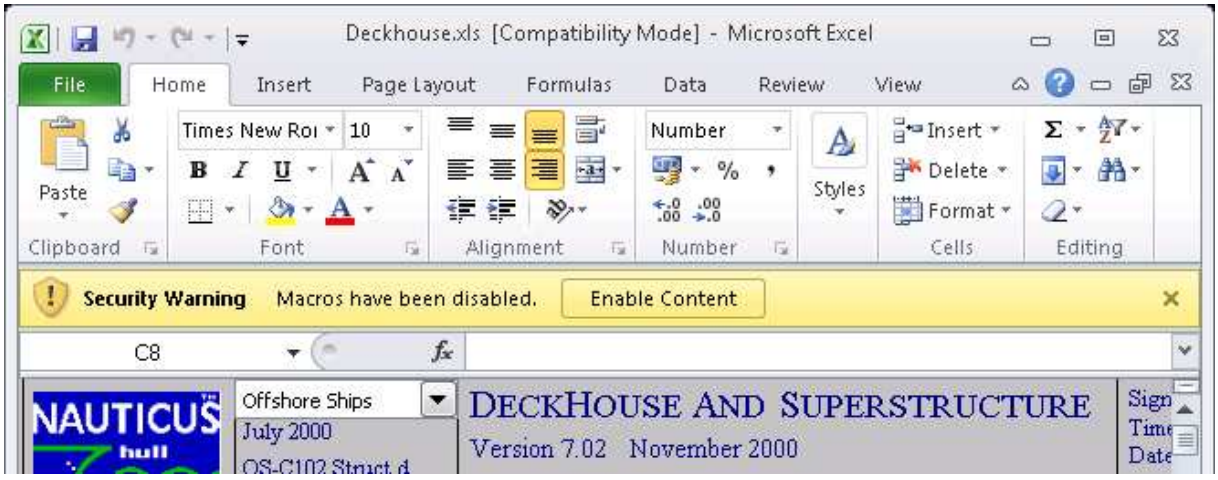
Alternative a) is recommended practice and may be used since all spreadsheets in this release are digitally signed by DNV. It's only necessary to do this once.

Old Jobs with existing spreadsheets from previous releases are however not signed. Alternative b) is therefore better for users who work with older jobs. It's only necessary to do this once or when the Hull Job Directory is changed.

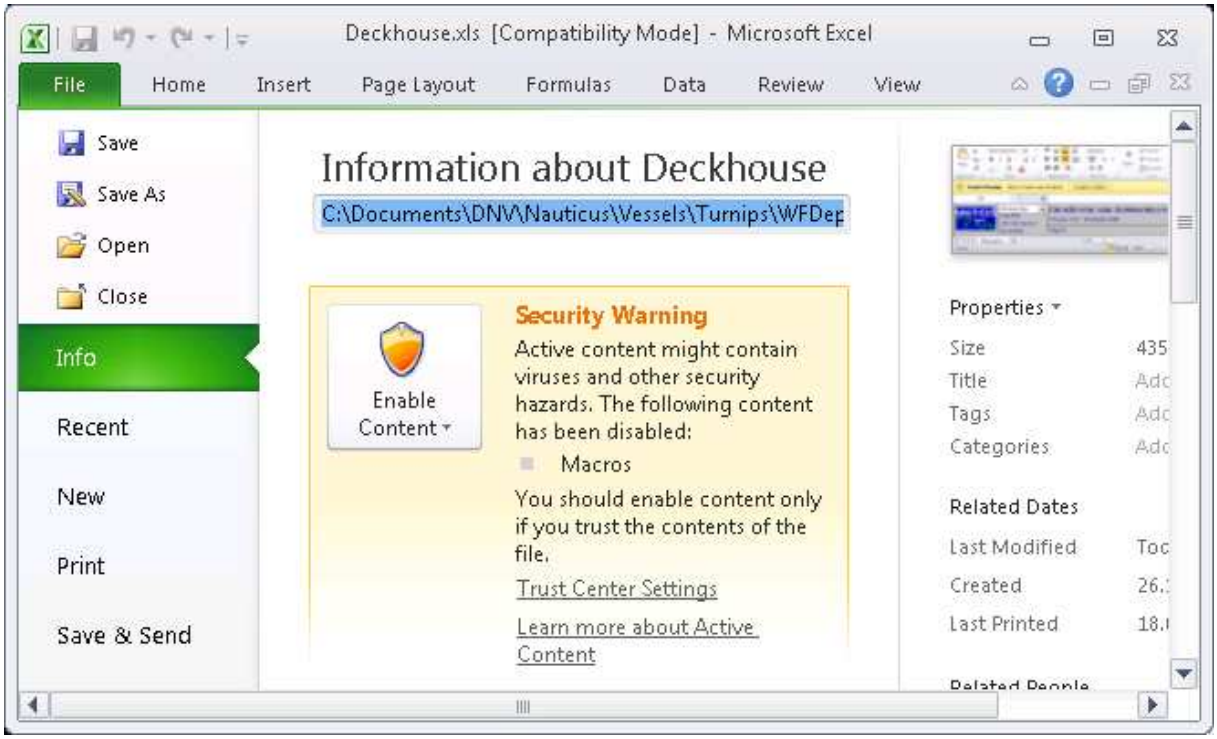
Alternative c) may always be used but is not recommended as common practice.

6.1.1 *How to add DNV to* "Trusted Publishers" *in Office 2010.*

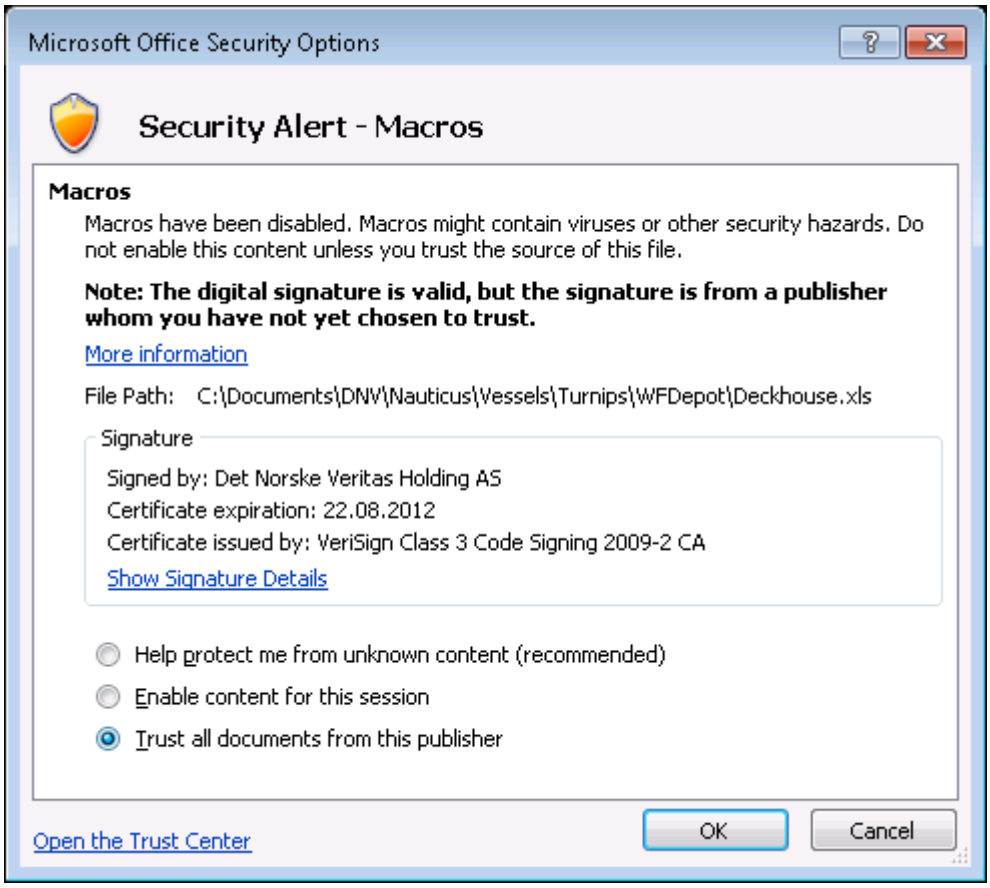
Open a signed spreadsheet



Do not press "Enable Content" as this will only add this spreadsheet to registry for trusted workbooks. Select instead the File tab.



Click on the “Enable Content” and select “Advanced Options”.

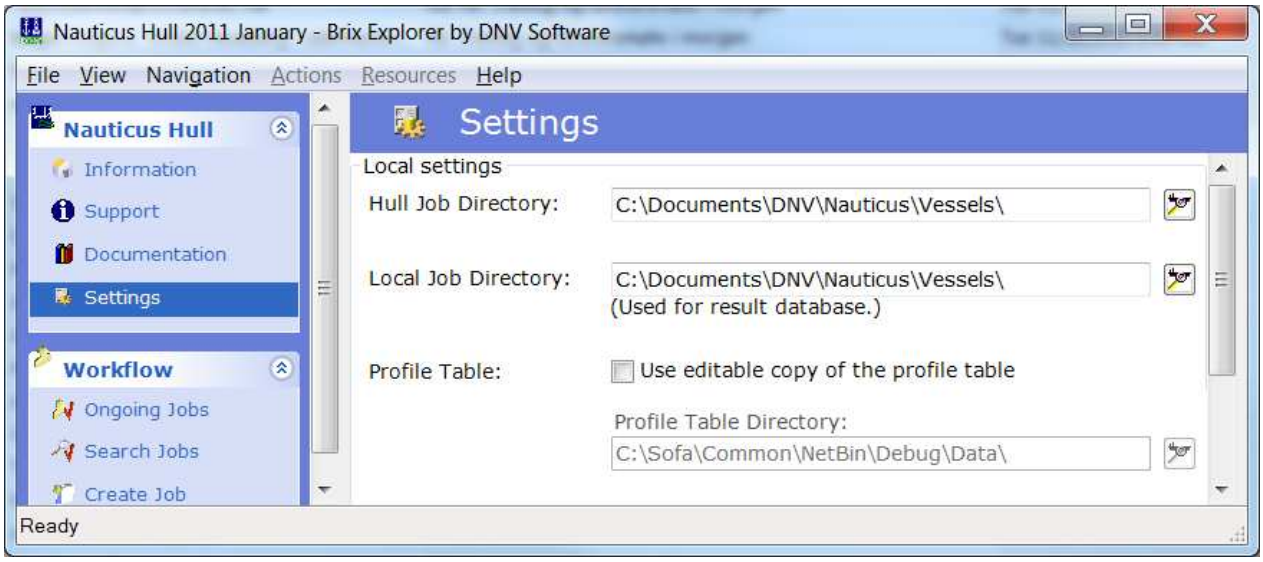

Microsoft Office Security Options
Security Alert - Macros
Macros
Macros have been disabled. Macros might contain viruses or other security hazards. Do not enable this content unless you trust the source of this file.
Note: The digital signature is valid, but the signature is from a publisher whom you have not yet chosen to trust.
More information
File Path: C:\Documents\DNV\Nauticus\Vessels\Turnips\WFDepot\Deckhouse.xls
Signature
Signed by: Det Norske Veritas Holding AS
Certificate expiration: 22.08.2012
Certificate issued by: VeriSign Class 3 Code Signing 2009-2 CA
Show Signature Details
Help protect me from unknown content (recommended)
Enable content for this session
Trust all documents from this publisher
Open the Trust Center
OK
Cancel

Select “Trust all documents from this publisher”, then OK.

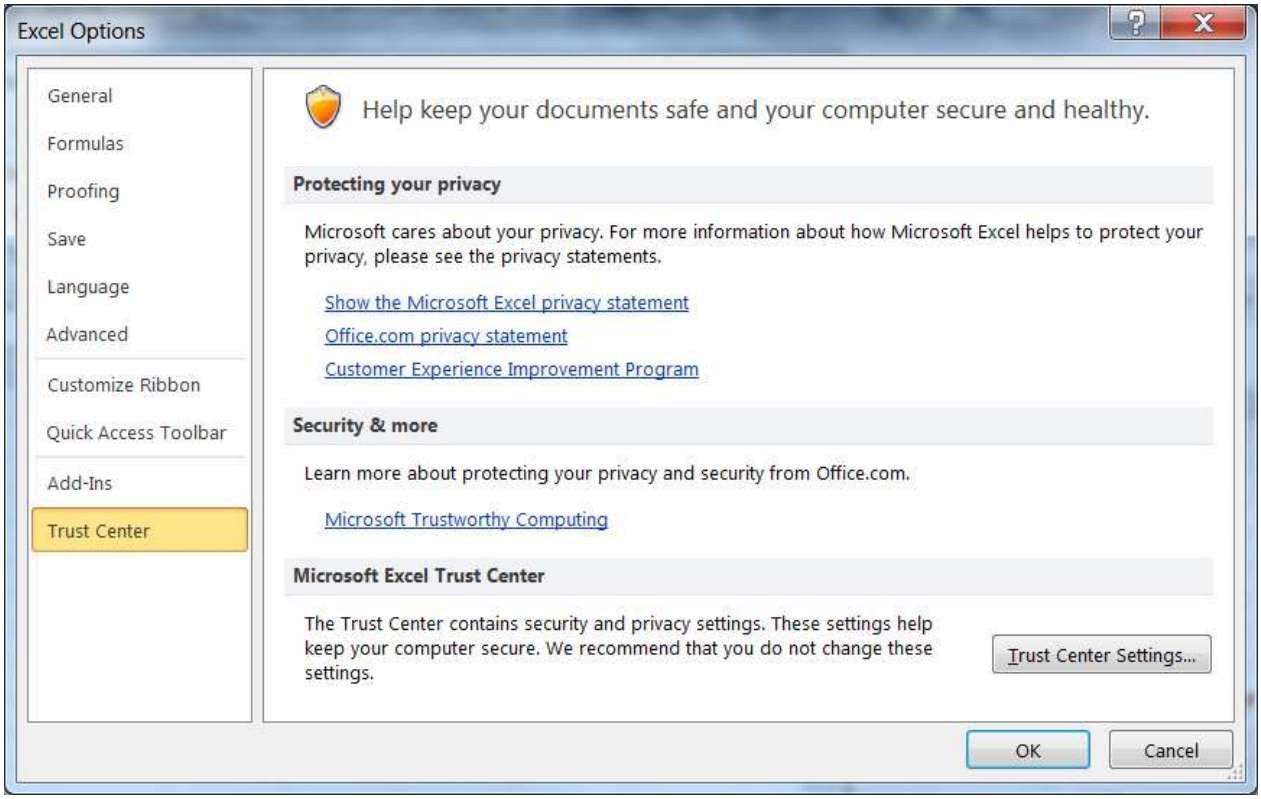
DNV is now defied as trusted publisher.

6.1.2 How to add Hull Job Directory to "Trusted Locations" *in Office 2010.*

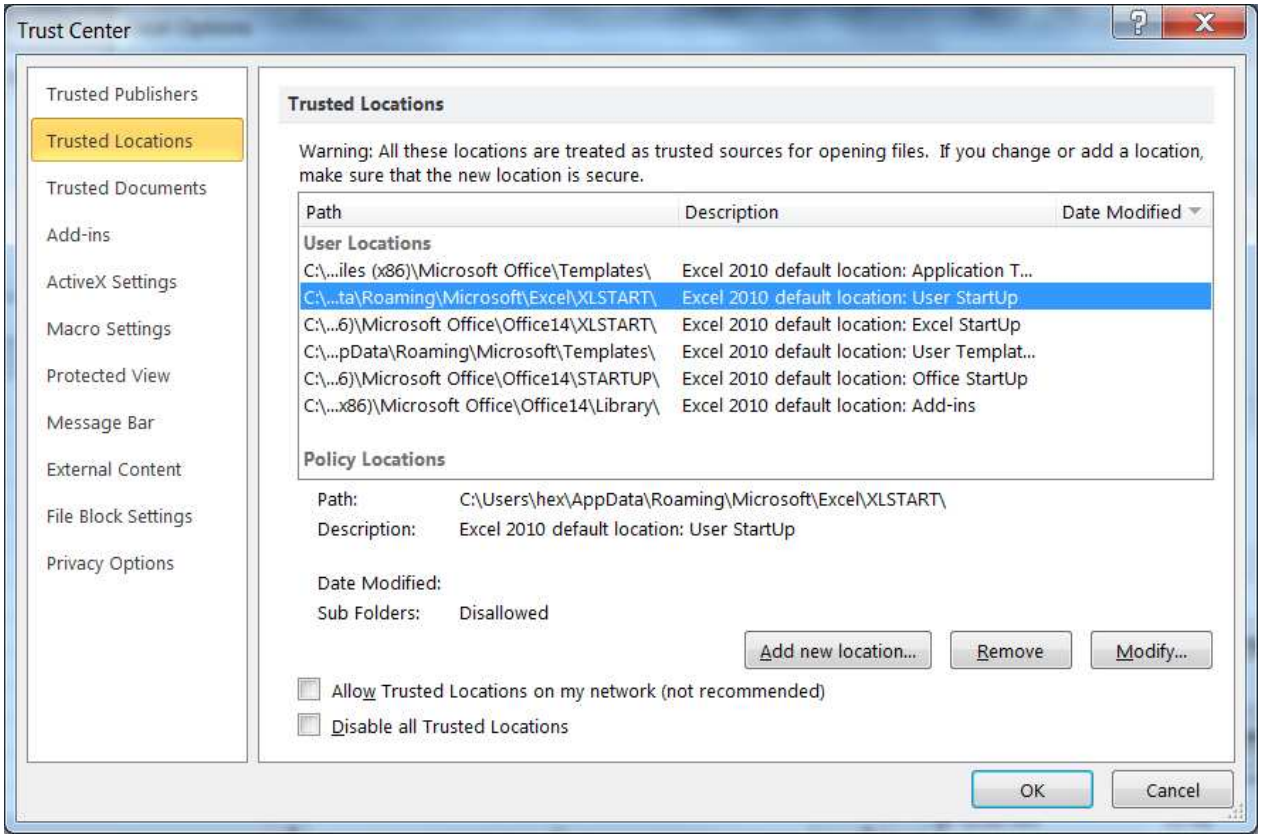
Current *Hull Job Directory* is found under *Settings* in Hull Explorer:



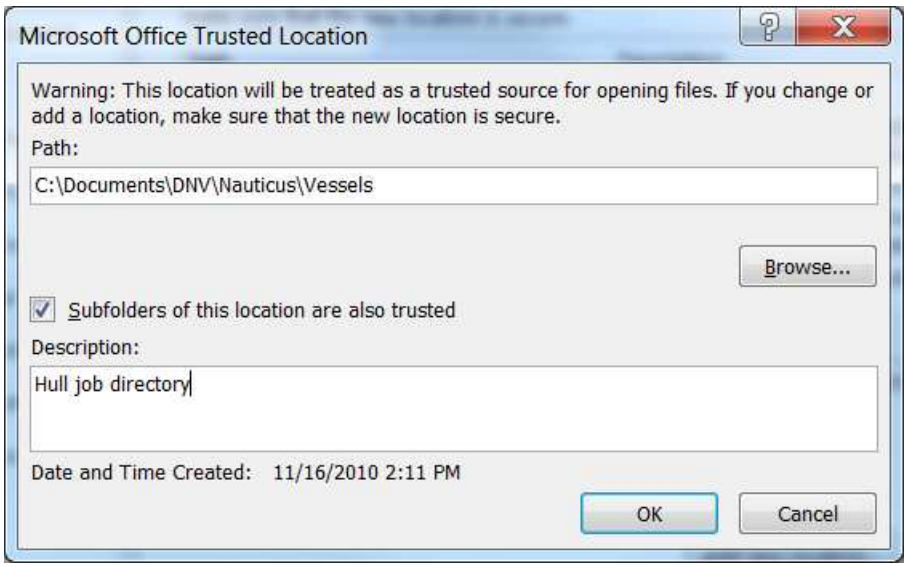
Start Excel and select File tab and Options menu.


Excel Options
General
Formulas
Proofing
Save
Language
Advanced
Customize Ribbon
Quick Access Toolbar
Add-Ins
Trust Center
Help keep your documents safe and your computer secure and healthy.
Protecting your privacy
Microsoft cares about your privacy. For more information about how Microsoft Excel helps to protect your privacy, please see the privacy statements.
Show the Microsoft Excel privacy statement
Office.com privacy statement
Customer Experience Improvement Program
Security & more
Learn more about protecting your privacy and security from Office.com.
Microsoft Trustworthy Computing
Microsoft Excel Trust Center
The Trust Center contains security and privacy settings. These settings help keep your computer secure. We recommend that you do not change these settings.
Trust Center Settings...
OK
Cancel

Press the *Trust Center Settings.*. button under *Trust Center*.

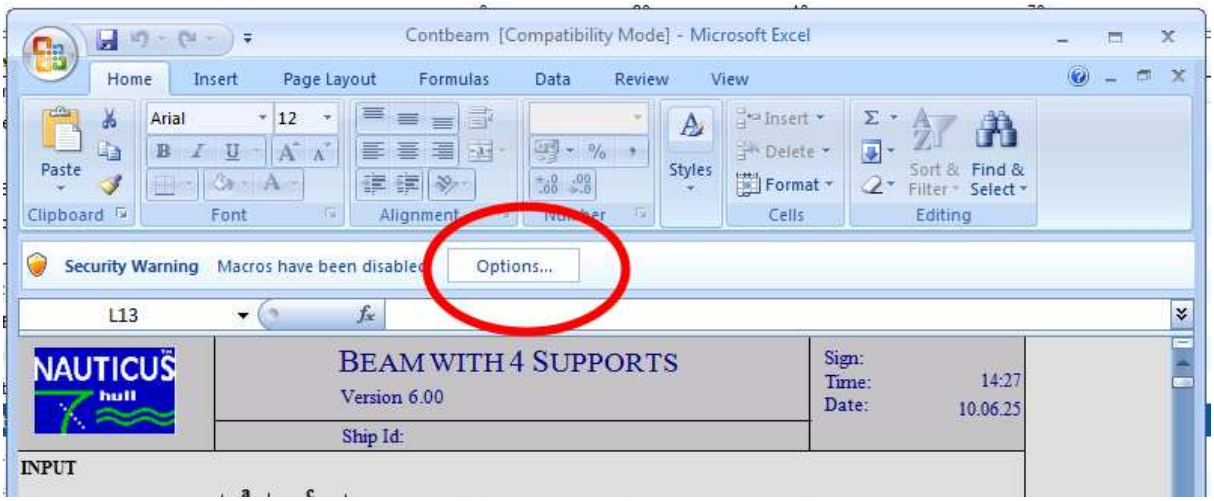


Select *Trusted Locations* and press *Add new location…* enter your Hull Job Directory (default is C:\Documents\DNV\Nauticus\Vessels). Remember to tick the *Subfolders of this location are also trusted*.

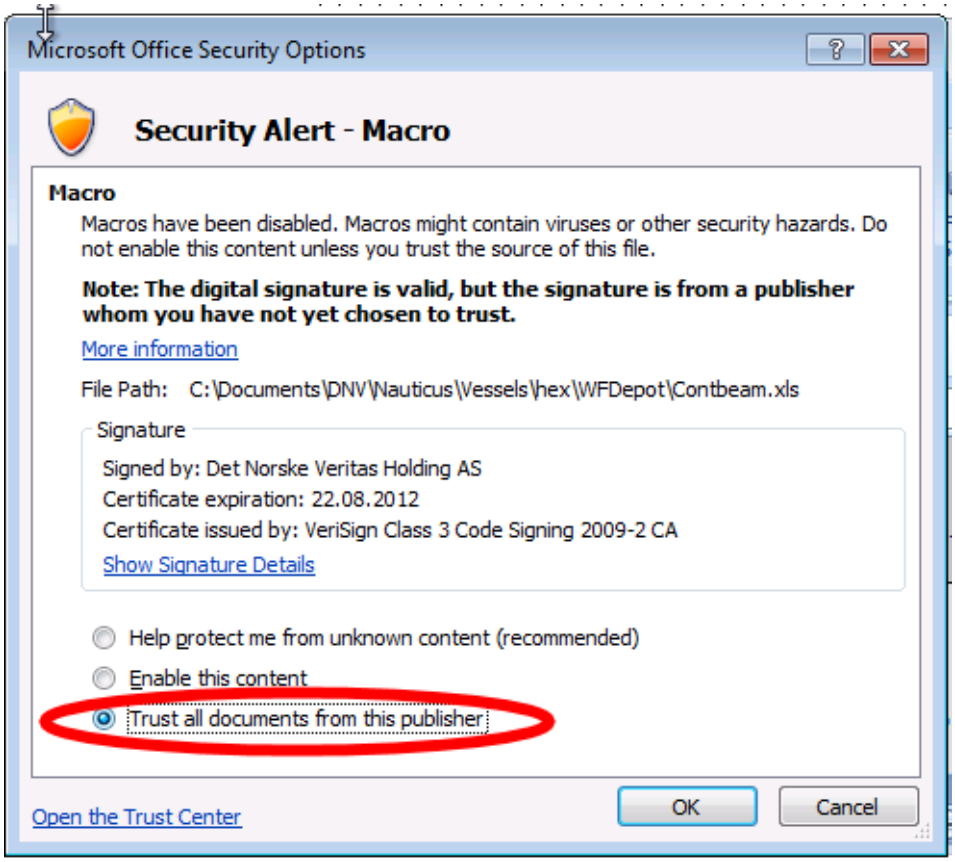

Microsoft Office Trusted Location
Warning: This location will be treated as a trusted source for opening files. If you change or add a location, make sure that the new location is secure.
Path:
C:\Documents\DNV\Nauticus\Vessels
Browse...
Subfolders of this location are also trusted
Description:
Hull job directory
Date and Time Created: 11/16/2010 2:11 PM
OK
Cancel

Press OK to close the menus.

6.1.3 How to add DNV to **"Trusted Publishers"** *in Office 2007.*



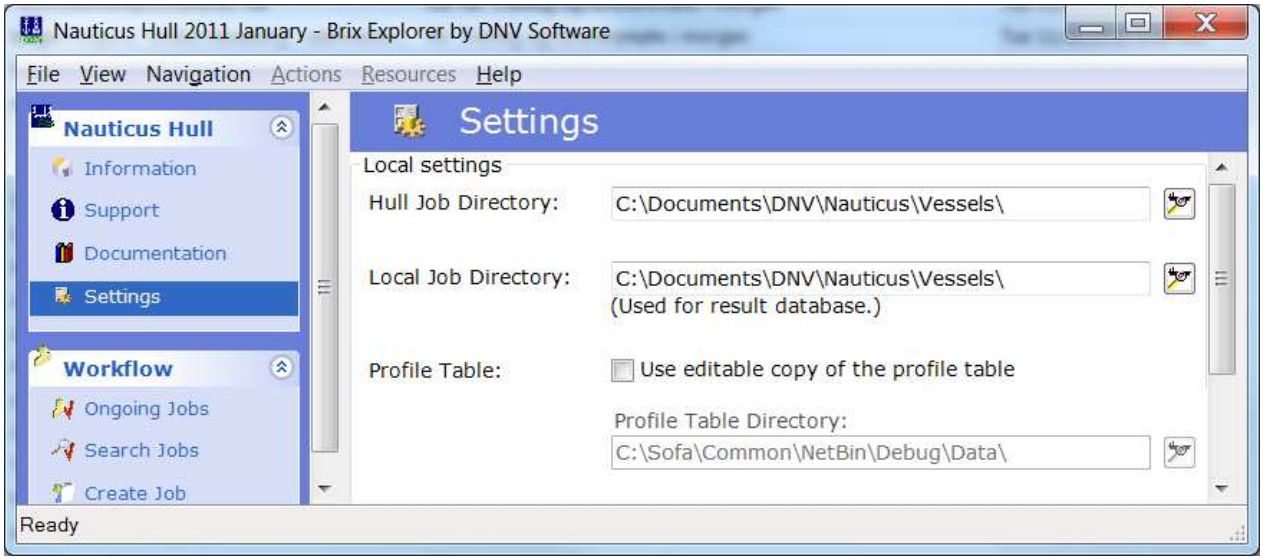
Press Options


Microsoft Office Security Options
Security Alert - Macro
Macro
Macros have been disabled. Macros might contain viruses or other security hazards. Do not enable this content unless you trust the source of this file.
Note: The digital signature is valid, but the signature is from a publisher whom you have not yet chosen to trust.
More information
File Path: C:\Documents\DNV\Nauticus\Vessels\hex\WFDepot\Contbeam.xls
Signature
Signed by: Det Norske Veritas Holding AS
Certificate expiration: 22.08.2012
Certificate issued by: VeriSign Class 3 Code Signing 2009-2 CA
Show Signature Details
Help protect me from unknown content (recommended)
Enable this content
Trust all documents from this publisher
Open the Trust Center
OK
Cancel

Select "Trust all documents form this publisher" and press OK.

6.1.4 How to add Hull Job Directory to "Trusted Locations" in Office 2007.

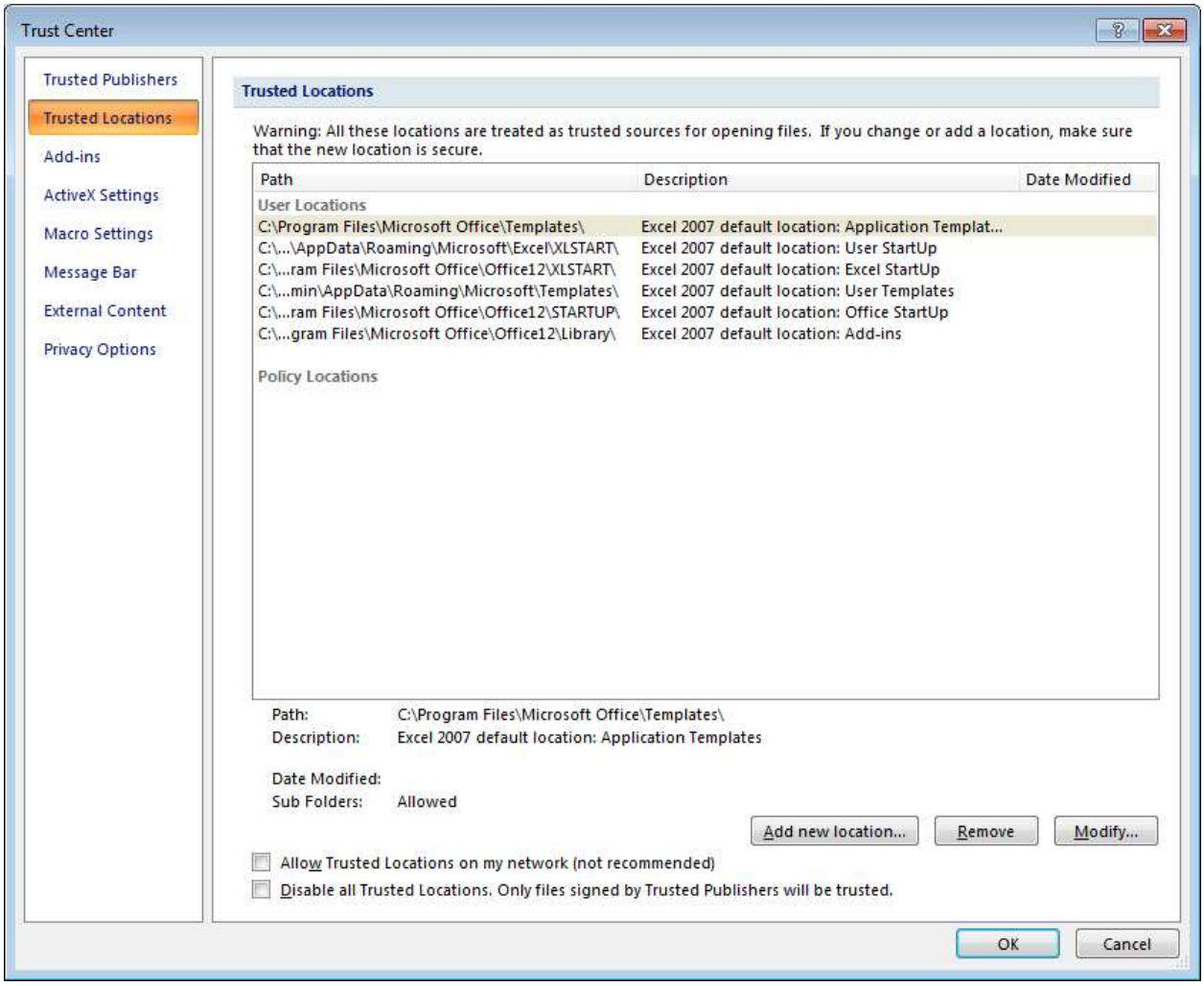
The current *Hull Job Directory* is found under *Settings* in Hull Explorer:



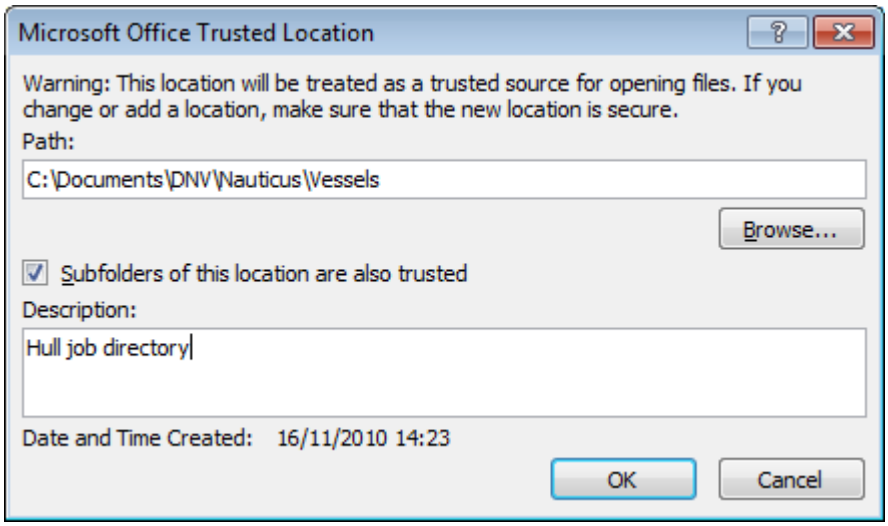
Start Excel and select the special circular Office button in upper left corner. Then press the *Excel Options* button.

Excel Options
Popular
Formulas
Proofing
Save
Advanced
Customize
Add-Ins
Trust Center
Resources
Help keep your documents safe and your computer secure and healthy.
Protecting your privacy
Microsoft cares about your privacy. For more information about how Microsoft Office Excel helps to protect your privacy, please see the privacy statements.
Show the Microsoft Office Excel privacy statement
Microsoft Office Online privacy statement
Customer Experience Improvement Program
Security & more
Learn more about protecting your privacy and security from Microsoft Office Online.
Microsoft Trustworthy Computing
Microsoft Office Excel Trust Center
The Trust Center contains security and privacy settings. These settings help keep your computer secure. We recommend that you do not change these settings.
Trust Center Settings...

Press the *Trust Center Settings..* button in *Trust Center*.


Trust Center
Trusted Publishers
Trusted Locations
Add-ins
ActiveX Settings
Macro Settings
Message Bar
External Content
Privacy Options
Trusted Locations
Warning: All these locations are treated as trusted sources for opening files. If you change or add a location, make sure that the new location is secure.
Path
Description
Date Modified
User Locations
C:\Program Files\Microsoft Office\Templates\ Excel 2007 default location: Application Templat...
C:\...\AppData\Roaming\Microsoft\Excel\XLSTART\ Excel 2007 default location: User StartUp
C:\...ram Files\Microsoft Office\Office12\XLSTART\ Excel 2007 default location: Excel StartUp
C:\...min\AppData\Roaming\Microsoft\Templates\ Excel 2007 default location: User Templates
C:\...ram Files\Microsoft Office\Office12\STARTUP\ Excel 2007 default location: Office StartUp
C:\...gram Files\Microsoft Office\Office12\Library\ Excel 2007 default location: Add-ins
Policy Locations
Path: C:\Program Files\Microsoft Office\Templates\
Description: Excel 2007 default location: Application Templates
Date Modified:
Sub Folders: Allowed
Add new location...
Remove
Modify...
Allow Trusted Locations on my network (not recommended)
Disable all Trusted Locations. Only files signed by Trusted Publishers will be trusted.
OK
Cancel

Press *Add new location…* and enter your Hull Job Directory (default is C:\Documents\DNV\Nauticus\Vessels). Remember to tick the *Subfolders of this location are also trusted*.


Microsoft Office Trusted Location
Warning: This location will be treated as a trusted source for opening files. If you change or add a location, make sure that the new location is secure.
Path:
C:\Documents\DNV\Nauticus\Vessels
Browse...
Subfolders of this location are also trusted
Description:
Hull job directory
Date and Time Created: 16/11/2010 14:23
OK
Cancel

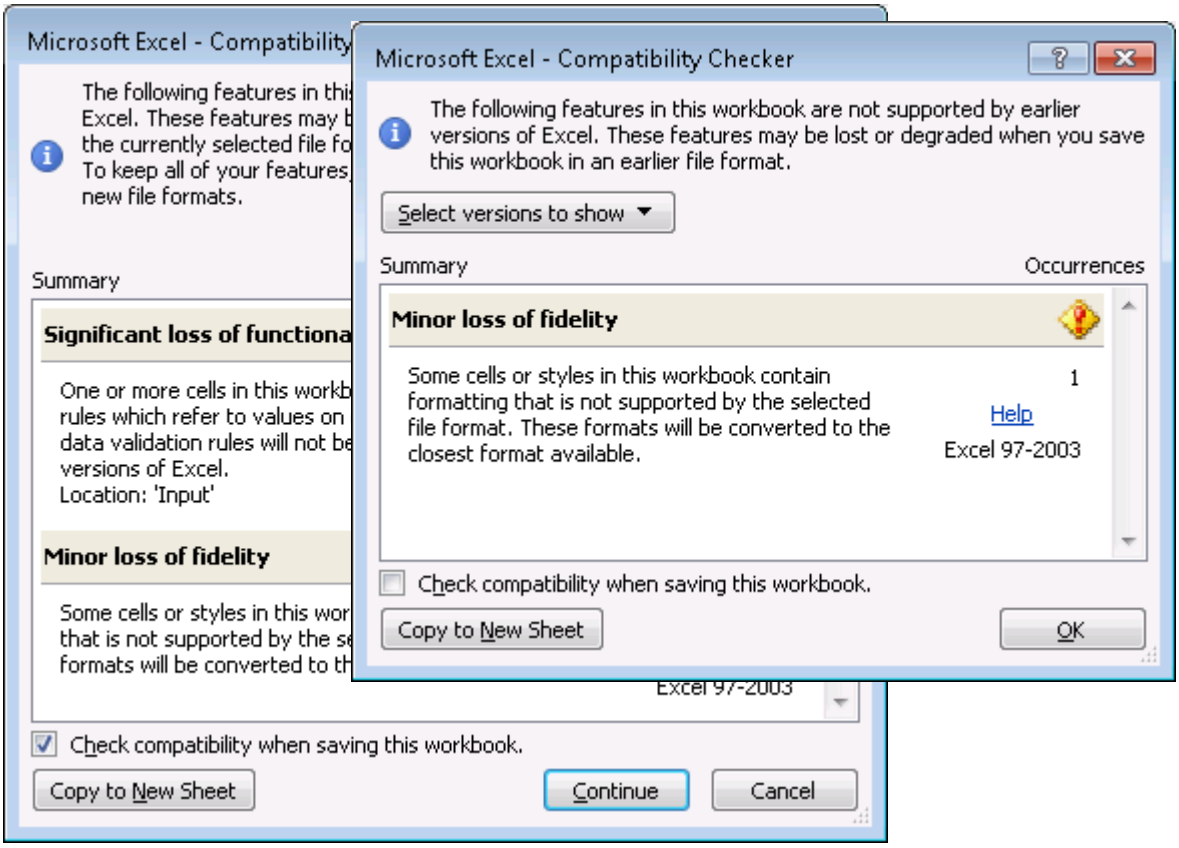
Press OK three times.

6.1.5 Working with older Hull spreadsheets in Office 2007/2010.

Spreadsheets from previous Hull releases will in most cases work ok with Office 2007 and 2010. Various warnings and error messages may however appear. Enabling of macros is described above and it is recommended to add *Hull Job Directory* to "*Trusted Locations*" if there are many old spreadsheets.

Some few spreadsheets will report errors during calculations and/or entering of data. In such cases it is recommended to create a new spreadsheet from the latest release and re-enter the same input data.

The most common are compability warnings upon saving. These warnings can be ignored. To unmark the checkbox named '*Check compatibility when saving this workbook*' will prevent this message from reappearing for this spreadsheet.


Microsoft Excel - Compatibility
The following features in this
Excel. These features may b
the currently selected file fo
To keep all of your features
new file formats.
Summary
Significant loss of functiona
One or more cells in this workb
rules which refer to values on
data validation rules will not be
versions of Excel.
Location: 'Input'
Minor loss of fidelity
Some cells or styles in this wor
that is not supported by the se
formats will be converted to th
Excel 97-2003
Check compatibility when saving this workbook.
Copy to New Sheet
Continue
Cancel
Microsoft Excel - Compatibility Checker
The following features in this workbook are not supported by earlier versions of Excel. These features may be lost or degraded when you save this workbook in an earlier file format.
Select versions to show
Summary
Occurrences
Minor loss of fidelity
Some cells or styles in this workbook contain formatting that is not supported by the selected file format. These formats will be converted to the closest format available.
1
Help
Excel 97-2003
Check compatibility when saving this workbook.
Copy to New Sheet
OK

6.1.6 Cases when the Signature is discarded.

The Signature of signed Excel workbooks is valid as long as the structure and macro code remain intact. This means that if a new worksheet is added to the workbook the Signature will be invalid. There are two programs in RuleCheck XL for which this may happen, namely:

CSR-Tank_PriSupMemb.xls and
CSR-Bulk_HoldMassCurves.xls.

In these programs additional worksheets may be created and the following message may be displayed when saving the program:

Microsoft Excel
You have modified a signed project. You do not have the correct key to sign this project. The signature will be discarded. Do you want to save changes and discard the signature or cancel the save action?
Save changes and discard signature
Cancel save

If the workbook is saved the Signature is discarded. The consequence of this is that the next time the workbook is opened a message asking the user whether the included macros should be allowed to run. Please, allow the macros to run in order to make the program work as intended.

7 Known Issues

The status of known issues, program errors and limitations are continuously updated in the online status list:

http://exchange.dnv.com/NauticusHull/STATUS%20LIST.pdf

7.1 FEA GeniE

GeniE may not be available from *FEA GeniE* jobs. This is a known issue when all the following conditions are fulfilled:

1. GeniE is not installed before installation of Nauticus Hull.
2. GeniE is not selected as part of Nauticus Hull installation.
3. GeniE is installed in a separate installation after Nauticus Hull.

To solve this problem, edit the file *Hull.config* located in the Hull installation folder, e.g. *C:\Program Files\DNVS\NauticusHull\Feb2010\Hull.config*.

Modify the line

<add key="GeniE" value=" "/>

by including the correct path to the GeniE executable. For example:

<add key="GeniE" value="C:\Program Files\DNVS\GeniE\Program\GenieR.exe"/>